

*A1  
cut.*  
the light along the optical path to the laser source whereby the optical path created by the laser source, the diffractive element and the reflective element causes the light to lase at the wavelength, and at least one microactuator coupled to one of the diffractive element and the reflective element for moving such element to select the single wavelength of the light.

*A2  
Sub 67*  
12. (Amended) The tunable laser of Claim 11 further comprising a controller for measuring the capacitance between the interdigitatable comb fingers and providing a drive signal to the at least one microactuator in response to the measured capacitance.

13. (Amended) A tunable laser comprising a laser source for providing light along an optical path with a wavelength selected from a range of wavelengths, a diffractive element positioned in the optical path and spaced from the laser source for redirecting the light received from the laser source, a reflective element positioned in the optical path and spaced from the diffractive element for receiving the light redirected by the diffractive element and for further redirecting the light back along the optical path to the diffractive element, the diffractive element receiving the light further redirected by the reflective element and returning the light along the optical path to the laser source whereby the optical path created by the laser source, the diffractive element and the reflective element causes the light to lase at the wavelength, at least one microactuator coupled to one of the diffractive element and the reflective element for moving such element to select the wavelength of the light and a counterbalance coupled to the at least one microactuator and the one of the diffractive element and the reflective element for inhibiting undesirable movement of the one of the diffractive element and the reflective element in response to externally applied accelerations to the tunable laser.

*Sub 887  
A3*  
28. (Amended) A tunable laser comprising a laser source for providing light along an optical path with a wavelength selected from a range of wavelengths, a diffractive element positioned in the optical path and spaced from the laser source for redirecting the light received from the laser source, a reflective element positioned in the optical path and spaced from the diffractive element for receiving the light redirected by the diffractive element and for further redirecting the light back along the optical path to the diffractive element, the diffractive element receiving the light further redirected by the reflective element and returning the light along the optical path to the laser source whereby the optical path created by the laser source, the diffractive element and the reflective element causes the light to lase at the wavelength, and a

rotatable micromechanical actuator coupled to one of the diffractive element and the reflective element for rotating such element to select the wavelength of the light.

29. (Amended) The tunable laser of Claim 28 wherein the micromechanical actuator includes a rotatable micromechanical actuator coupled to one of the diffractive element and the reflective element for rotating and translating such element.

*A 3 sub 897* 30. (Amended) The tunable laser of Claim 28 wherein the micromechanical actuator includes an additional microactuator for translating such element.

*Cont.* 31. (Amended) A tunable laser comprising a laser source for providing light along an optical path with a wavelength selected from a range of wavelengths, a diffractive element positioned in the optical path and spaced from the laser source for redirecting the light received from the laser source, a reflective element positioned in the optical path and spaced from the diffractive element for receiving the light redirected by the diffractive element and for further redirecting the light back along the optical path to the diffractive element, the diffractive element receiving the light further redirected by the reflective element and returning the light along the optical path to the laser source whereby adjustment of the optical path created by the laser source, the diffractive element and the reflective element causes the light to lase at [the] a selected wavelength, a collimating lens disposed between the laser source and the diffractive element and a microactuator coupled to the collimating lens for moving the collimating lens to enhance the return of the light to the laser source.

*Add the following claim:*

--35. The tunable laser of Claim 13 wherein the at least one microactuator includes a microactuator coupled to the reflective element for rotating the reflective element about a pivot point.

*A 4* 36. The tunable laser of Claim 35 wherein the pivot point is spaced apart from the microactuator.

*Sub 8107* 37. A tunable laser comprising a laser source for providing light along an optical path with a wavelength selected from a range of wavelengths, a diffractive element positioned in the optical path and spaced from the laser source for redirecting the light received from the laser source, a reflective element positioned in the optical path and spaced from the diffractive element for receiving the light redirected by the diffractive element and for further redirecting the light back along the optical path to the diffractive element, the diffractive element receiving